Massachusetts Department of Public Health
Drug Analysis Laboratory
Boston, MA.

Comprehensive Review: (Performed by a peer on 100% of cases)

Criteria for Comprehensive Review
The scope of the comprehensive review includes, but is not limited to all chain of custody documents, all notes, raw data, examination of packaged evidence and certificate of analysis.

1. Verify that the appropriate documentation is enclosed for comprehensive review.
   The following documents may include originals or copies of the drug receipt, control card, drug analysis form, MS tracking (control) sheet, MS sequence (batch) sheet, tune report, QC mix, raw data, and certificate of analysis.
2. Verify that the Drug Receipt (completed by both the submitting agency and evidence officer) is filled out completely.
   The following information should be documented on the drug receipt: submitting city or department, name and rank of submitting officer, name of the defendant/s (if known), description of the sample, gross weight of the sample, assigned laboratory #, initial of the evidence officer and ate received.
3. Compare the Drug Receipt and the actual evidence as recorded in the chemist's Drug Analysis Form.
   Check that any discrepancy between the drug receipt and actual evidence was noted.
4. It is not appropriate to perform part three when the chemist has signed the corresponding drug receipt. In order to resolve this issue, the following should be done:
   a. The chemist tries to avoid analyzing a sample if they have signed the drug receipt.
   b. If part 4a is not possible, another person reconciles the evidence before it is opened. (Laboratory or Evidence Office Supervisor.)
   c. The person who reconciles the evidence with the Drug Receipt will initial and date back of the control card and the chemist's Drug Analysis Form.
5. Verify that the Drug Analysis Form is filled out completely.
   The following information should be documented on the Drug Analysis Form: Lab #, agency, analyst's initials, # of samples tested, evidence office gross weight, check the integrity of the sample (bag is sealed and initialed by officer), physical description of the sample, weight of the sample performed, all the appropriate tests are performed, documented and dated.
6. Verify proper weighing, sampling technique used and math calculations.
7. Examine and verify the preliminary testing raw data (if applicable.)
   a. Verify which instrument was used.
   b. Verify the use of blanks, standards and sample.
   c. Verify the blanks, standards and sample are within the laboratory acceptance criteria.
8. Verify that the MS Tracking (Control)Sheet is filled out completely and accurately (if applicable.)
   The following information should be documented on the MS Tracking (Control) Sheet: analyst's initials, Lab#, agency, preliminary test results, comments (test/s performed), retention time of the standards, retention time of the sample, library quality match, confirmatory test results, date analyzed and sequence file name.

9. Verify that the MS Sequence (Batch) Sheet is filled out completely and accurately (if applicable.)
   The following information should be documented on the MS sequence (Batch) sheet: analyst, setup date, analysis date, GC/MS system used, sequence file name, data file name, methods used, blanks used, standards used and lab #/s used for this run.
10. Verify that the confirmatory instrument is working properly (if applicable.)
    a. For GC/MS & LC/MS/MS
       i. Verify that a tune report was performed and accepted.
       ii. Verify that a QC mix was performed and accepted.
    b. For IR
       i. Verify that internal polystyrene was performed and accepted.
11. Examine and verify the confirmatory testing raw data (if applicable.)
    a. Verify which confirmatory instrument was used.
    b. Verify the use of blanks, standards and sample.
    c. Verify the blanks, standards and sample are within the laboratory acceptance criteria..
12. Verify the accuracy of the drug receipt.
    Ensure the following information is correct: lab #, submitting agency, name and rank of submitting officer, date submitted, defendant's name, description of the sample, and the gross weight.
13. Verify the accuracy of the control card.
    Ensure the following information is correct: lab #, submitting agency, name and rank submitting officer, date submitted, description of the sample, defendant's name, # of items tested, # of tests performed, net weight, prelim findings, analyst's initial and date analyzed and confirmatory findings. The back of the control card documents the sequence file name.
14. Verify the accuracy of the certificate of analysis.
    Ensure the following information is correct: lab #, submitting agency, name and rank submitting officer, date submitted, description of the sample, defendant's name, # of items tested, net weight, drug identification, class and analyst/s.
15. Verify the accuracy of the evidence envelope.
    Ensure the following information is correct: lab #, submitting agency, defendant's name and date received/submitted.
16. Examine and verify packaged evidence.
    Ensure that the sample is sealed, labeled with the appropriate lab #, and analyst's initials.
17. Verify that the appropriate evidence envelope contains the correct certificate of analysis and packaged evidence.
18. After reviewing all the documentation and it meets the laboratory criteria, the comprehensive review sheet must be signed and dated.
19. Place comprehensive review sheet with the appropriate documents and file according to laboratory policy.